

Supporting Information for

Observational and modelling analysis of Canada's only F5/EF5 tornado

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Movie S1

Unpublished manuscript S1

Additional Supporting Information (Files uploaded separately)

Caption for Movie S1: An animation of the observed radar reflectivity (filled; left panel), and radial velocity (filled; right panel) at the 0.5 elevation angle between 2000 UTC 22 June 2007 and 0000 UTC 23 June 2007. Elie, MB is indicated by a purple dot. Station models in the area are also displayed. Thick circles indicate the 50- and 100-km range rings, with the altitude (km ASL) at these ranges indicated in the boxes.

Introduction

An animation was created using the same software and data used to produce Figure 5 in the manuscript. The purpose of this supplemental information is to help readers see the radar-detected flow evolution around the time of the Elie supercell initiation when it is animated. This animation is referenced in section 3.3.1 of the manuscript.

Some analysis in the submitted manuscript (in section 5.1.1) was based on the results of an unpublished manuscript by J. Hanesiak, M. Taszarek, D. Walker, C.-C. Wang, and D. Betancourt “**Significant tornado environments in Canada using ERA5-derived convective parameters**”, submitted to the Journal of Weather and Climate Extremes in April 2023 and is currently in revision. This unpublished manuscript was also referenced in various sections throughout this submitted manuscript.